

Appl. No. : 10/686,063
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AMENDMENTS TO THE CLAIMS

A complete listing of all pending claims is presented below.

1-55. (Canceled)

56. (Previously Presented) A method for retracting tissue adjacent a spinal location, comprising:

positioning a retractor in a patient adjacent the spinal location, the retractor having a proximal end and a distal end and defining a passage therethrough, the distal end being positioned adjacent the spinal location and the proximal end being positioned outside of the patient; and

expanding at least a portion of the retractor adjacent the spinal location by moving a plurality of discrete segments of the retractor away from each other to retract tissue adjacent the spinal location, wherein the discrete segments surround said passage in the expanded configuration.

57. (Previously Presented) The method of Claim 56, wherein expanding at least a portion of the retractor comprises moving at least three discrete segments of the retractor away from each other.

58. (Previously Presented) The method of Claim 56, wherein expanding at least a portion of the retractor comprises moving at least four discrete segments of the retractor away from each other.

59. (Previously Presented) The method of Claim 56, wherein expanding at least a portion of the retractor comprises moving five discrete segments of the retractor away from each other.

60. (Previously Presented) The method of Claim 56, wherein each of the discrete segments comprises an arcuate edge.

61. (Previously Presented) The method of Claim 56, wherein expanding at least a portion of the retractor causes a cross-sectional area of the passage at the distal end to be larger than a cross-sectional area of the passage at the proximal end.

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62. (Previously Presented) The method of Claim 56, further comprising delivering a plurality of instruments simultaneously through the passage to perform a procedure at the spinal location.

63. (Previously Presented) The method of Claim 56, wherein expanding at least a portion of the retractor comprises reducing overlap between adjacent discrete segments.

64. (Previously Presented) The method of Claim 56, wherein each of the discrete segments is made of a sheet material.

65. (Previously Presented) A method for retracting tissue adjacent a spinal location, comprising:

positioning a retractor in a patient adjacent the spinal location, the retractor having a proximal portion and a distal portion;

pivoting the distal portion relative to the proximal portion; and

expanding at least a portion of the distal portion adjacent the spinal location by moving a plurality of discrete segments of the retractor away from each other to retract tissue adjacent the spinal location.

66. (Previously Presented) The method of Claim 65, wherein expanding at least a portion of the retractor comprises moving at least three discrete segments of the retractor away from each other.

67. (Previously Presented) The method of Claim 65, wherein expanding at least a portion of the retractor comprises moving at least four discrete segments of the retractor away from each other.

68. (Previously Presented) The method of Claim 65, wherein expanding at least a portion of the retractor comprises moving five discrete segments of the retractor away from each other.

69. (Previously Presented) The method of Claim 65, wherein each of the discrete segments comprises an arcuate edge.

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70. (Previously Presented) The method of Claim 65, further comprising delivering a plurality of instruments simultaneously through the retractor to perform a procedure at the spinal location.

71. (Previously Presented) The method of Claim 65, wherein expanding at least a portion of the retractor comprises reducing overlap between adjacent discrete segments.

72. (Previously Presented) The method of Claim 65, wherein each of the discrete segments is made of a sheet material.

73. (Previously Presented) The method of Claim 65, wherein expanding at least a portion of the retractor causes a cross-sectional area of the retractor at a first location to be larger than a cross-sectional area of the passage at a second location proximal of the first location.

74. (Previously Presented) A method of treating a spine of a patient, comprising:

providing a dilating structure for dilating tissue;

providing a retractor having a proximal end, a distal end, and a plurality of discrete segments, wherein the elongate body defines a length between the proximal and distal ends such that the proximal end can be positioned outside the patient and the distal end can be positioned inside the patient adjacent a spinal location;

inserting the retractor and the dilating structure such that the retractor and dilating structure are in simultaneous use; and

expanding at least a portion of the retractor by moving the plurality of discrete segments of the retractor away from each other to retract tissue adjacent the spinal location.

75. (Previously Presented) The method of Claim 74, wherein the dilating structure comprises a plurality of dilators.

76. (Previously Presented) The method of Claim 74, wherein expanding at least a portion of the retractor comprises moving at least three discrete segments of the retractor away from each other.

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77. (Previously Presented) The method of Claim 74, wherein expanding at least a portion of the retractor comprises moving at least four discrete segments of the retractor away from each other.

78. (Previously Presented) The method of Claim 74, wherein expanding at least a portion of the retractor comprises moving five discrete segments of the retractor away from each other.

79. (Previously Presented) The method of Claim 74, wherein expanding at least a portion of the retractor causes a cross-sectional area of said retractor at a first location to be greater than a cross-sectional area of said retractor at a second location, wherein the first location is distal to the second location.

80. (Previously Presented) The method of Claim 74, wherein expanding at least a portion of the retractor comprises expanding at least a portion of the retractor along at least two perpendicular axes.

81. (Previously Presented) The method of Claim 80, wherein one of the at least two perpendicular axes is generally parallel with a cephalad-caudal axis of the patient, and wherein another of the at least two perpendicular axes is generally parallel with a medial-lateral axis of the patient.

82. (Previously Presented) The method of Claim 74, further comprising inserting a first surgical instrument through the retractor to the spinal location.

83. (Previously Presented) The method of Claim 82, wherein the first surgical instrument comprises an endoscopic surgical instrument.

84. (Previously Presented) The method of Claim 82, further comprising performing a treatment with said first surgical instrument.

85. (Previously Presented) The method of Claim 82, further comprising inserting a second surgical instrument through the retractor to the spinal location, and performing a second treatment with said second surgical instrument.

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86. (Previously Presented) The method of Claim 85, wherein the second surgical instrument is inserted before the first surgical instrument is completely removed.

87. (Previously Presented) A method for retracting tissue adjacent a spinal location, comprising:

positioning a retractor in a patient adjacent the spinal location, the retractor having a proximal end and a distal end, the distal end being positioned adjacent the spinal location and the proximal end being positioned outside of the patient; and

expanding at least a portion of the retractor adjacent the spinal location by moving a plurality of discrete segments of the retractor away from each other to retract tissue adjacent the spinal location, wherein the discrete segments are moved away from each other by being guided incrementally along successive notches of a guiding mechanism.

88. (Previously Presented) The method of Claim 87, wherein expanding at least a portion of the retractor comprises moving at least three discrete segments of the retractor away from each other.

89. (Previously Presented) The method of Claim 87, wherein expanding at least a portion of the retractor comprises moving at least four discrete segments of the retractor away from each other.

90. (Previously Presented) The method of Claim 87, wherein expanding at least a portion of the retractor comprises moving five discrete segments of the retractor away from each other.

91. (Previously Presented) The method of Claim 87, wherein each of the discrete segments comprises an arcuate edge.

92. (Previously Presented) The method of Claim 87, wherein expanding at least a portion of the retractor causes a cross-sectional area of the retractor at the distal end to be larger than a cross-sectional area of the retractor at the proximal end.

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93. (Previously Presented) The method of Claim 87, further comprising delivering a plurality of instruments simultaneously through the retractor to perform a procedure at the spinal location.

94. (Previously Presented) The method of Claim 87, wherein expanding at least a portion of the retractor comprises reducing overlap between adjacent discrete segments.

95. (Previously Presented) The method of Claim 87, wherein each of the discrete segments is made of a sheet material.

96. (Previously Presented) The method of Claim 87, wherein each of said notches maintains a desired configuration of said retractor.

97. (Previously Presented) The method of Claim 87, wherein each of said notches prevents the retractor from moving from an expanded configuration to a contracted configuration.

98. (Previously Presented) The method of Claim 87, wherein the guiding mechanism comprises at least three notches.

99. (Previously Presented) A method for retracting tissue adjacent a spinal location, comprising:

positioning a retractor in a patient adjacent the spinal location, the retractor having a proximal end and a distal end, the distal end being positioned adjacent the spinal location and the proximal end being positioned outside of the patient; and

expanding at least a portion of the retractor adjacent the spinal location by moving a plurality of discrete segments of the retractor away from each other to retract tissue adjacent the spinal location, wherein expanding at least a portion of the retractor causes a cross-sectional area of the retractor at the distal end to be larger than a cross-sectional area of the retractor at the proximal end.

100. (Previously Presented) The method of Claim 99, wherein expanding at least a portion of the retractor comprises moving at least three discrete segments of the retractor away from each other.

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101. (Previously Presented) The method of Claim 99, wherein expanding at least a portion of the retractor comprises moving at least four discrete segments of the retractor away from each other.

102. (Previously Presented) The method of Claim 99, wherein expanding at least a portion of the retractor comprises moving five discrete segments of the retractor away from each other.

103. (Previously Presented) The method of Claim 99, wherein each of the discrete segments comprises an arcuate edge.

104. (Previously Presented) The method of Claim 99, further comprising delivering a plurality of instruments simultaneously through the retractor to perform a procedure at the spinal location.

105. (Previously Presented) The method of Claim 99, wherein expanding at least a portion of the retractor comprises reducing overlap between adjacent discrete segments.

106. (Previously Presented) The method of Claim 99, wherein each of the discrete segments is made of a sheet material.

107. (New) A surgical method comprising:

incising tissue of a body to create an incision;

directing a retractor through the incision to a surgical site;

expanding the retractor by separating a first retractor blade from a second retractor blade by moving at least one of the first retractor blade and the second retractor blade along a first connector of the retractor, and

separating a third retractor blade from a fourth retractor blade by moving at least one of the third retractor blade and the fourth retractor blade along a second connector; and

performing at least a portion of a surgical procedure through the retractor.

108. (New) The method of Claim 107, wherein the retractor extends to a vertebra and at least a portion of the surgical procedure is performed at the vertebra, and wherein the method

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further includes directing an instrument between at least two retractor blades to access the vertebra.

109. (New) The method of Claim 107, wherein at least one of the first retractor blade and the second retractor blade is moved along a nonlinear line.

110. (New) The method of Claim 107, wherein at least one of the third retractor blade and the fourth retractor blade is moved along a nonlinear line.